

AMENDMENTS TO THE CLAIMS

1. - 23. (Canceled)

24. (Currently Amended) A convertible top system for a convertible vehicle having a vehicle body, the system comprising:

a plurality of pivotable external top elements, the top elements including foldable roof elements that extend over a passenger compartment of the vehicle when the foldable roof elements are in a closed position;

a plurality of pivot joints providing pivotable connections between the plurality of external top elements and between at least one of the top elements and the vehicle body, at least one roof element being pivotably connected to the vehicle body with at least one of the pivot joints; and

at least one drive

including an electric motor operable to pivot one of the roof elements with respect to another of the roof elements, the electric motor introducing a drive torque directly into [[one of]] the pivot joint joints connecting the two roof elements;

wherein at least some of the pivot joints are independently controllable.

25. (Original) The convertible top system according to claim 24, further comprising:

a flexible shaft interconnecting the electric motor with the one of the pivot joints for directly introducing drive torque into the pivot joint.

26. (Original) The convertible top system according to claim 25, wherein:

the plurality of pivot joints includes at least two pivot joints oppositely disposed with respect to a longitudinal axis of a vehicle;

a flexible shaft interconnecting the electric motor with the two joints for directly introducing drive torque into each of the two joints.

27. (Original) The convertible top system according to claim 24, wherein:

at least some of a plurality of pivot joints are made of the same construction.

28. (Original) The convertible top system according to claim 24, wherein:  
one of the pivot joints is driven by means of a transmission device, with the transmission device being arranged between a lever associated with a first external element and a further lever of a second external element of a vehicle.

29. (Original) The convertible top system according to claim 28, wherein the transmission device includes a screw, the system further comprising:  
a first gear supported at one of the levers;  
a second gear engaged with the first gear;  
a flexible shaft rotatably transmitting the torque of the electric motor to the screw of the transmission device; and  
said screw being in engagement with the first gear.

30. (Original) The convertible top system according to claim 24, further comprising:  
a position detection sensor arranged at one of the pivot joints.

31. (Previously Presented) The convertible top system according to claim 30, wherein  
the position detection sensor comprises a potentiometer  
a striker being provided in a transmission device of the pivot joint coaxially to a pivot axle of the joint, the potentiometer being disposed on said striker.

32. (Previously Presented) The convertible top system according to claim 24, further comprising:  
an adjustable abutment with a regulating screw provided at one of the pivot joints.

33. (Original) The convertible top system according to claim 24, wherein:  
at least one of the pivot joints is rotatable by at least approximately 360°.

34. (Original) The convertible top system according to claim 24, further comprising:

an electric motor associated with each pivotable connection between the top elements and to the vehicle body.

35. (Original) The convertible top system according to claim 24, wherein:  
the pivotable connections between the top elements and to the vehicle body are each formed by at least one controllable pivot joint and by at least one passive pivot joint, with an associated pivot axle of the pivotable connection being a pivot axle of the passive pivot joint.

36. (Original) The convertible top system according to claim 24, further comprising:  
a central electrical control unit; and  
a plurality of electric motors each connected to the central electrical control unit.

37. (Original) The convertible top system according to claim 36, wherein:  
each electric motor has a control unit, each control unit being connected by a data bus to the central control unit.

38. (Previously Presented) The convertible top system according to claim 24, wherein:  
the foldable roof elements include three roof elements which can be folded together in an S-shape such that a front one of the roof elements is stowed in a folding position rearwardly pivoted over a middle one of the roof elements, a rear one of the roof elements lying below the front roof element in the folding position and is rearwardly pivoted with respect to its position with a closed top;

wherein on an opening movement of the top, the front roof element is pivoted upwardly and rearwardly around a first pivot axle, the middle roof element is pivoted around a rear second pivot axle and the rear roof element is pivoted rearwardly around a rear third pivot axle, with the pivoting of the front roof element selectively taking place substantially before the pivoting of the middle roof element and of the rear roof element.

39. (Original) The convertible top system according to claim 24, wherein:  
the external top elements include a clamp and a top storage well cover;

on an opening movement of the top, the clamp is first raised for the release of a upwardly pivoting movement of the top storage well cover and is lowered again after the putting up of the top storage well cover, after which the roof elements are placed on the clamp.

40. (Withdrawn) The convertible top system according to claim 24, wherein:

the foldable roof elements include three roof elements which can be folded such that, on an opening movement of the top, a middle one of the roof elements is first pivoted around a rear pivot axle and a rear one of the roof elements is pivoted rearwardly around a rear pivot axle; and, in an at least approximately horizontal position of the rear roof element, a front one of the roof elements and the middle roof element are placed down such that the middle roof element is pivoted on the rear roof element and at least approximately parallel thereto and the front roof element is pivoted downwardly in respect to this into an at least approximately vertical position.

41. (Original) The convertible top system according to claim 24, wherein:

the external top elements include a top storage well cover; and

on an opening movement of the top, the top storage well cover is first pivoted upwardly and, in a stowage position of the roof elements is pivoted downwardly into an at least approximately horizontal position.

42. (Original) The convertible top system according to claim 24, wherein:

at least one external element is a top storage well cover or a gate cover, which can be raised from a closed position at least at one edge by pivoting by means of at least one drivable pivot joint and at least one associated drive around an oppositely disposed edge.

43. (Original) The convertible top system according to claim 42, wherein:

the at least one drivable pivot joint engages at a linkage which is hingedly fixed at one end to the vehicle body and is hingedly fixed at the other end to a region of the cover disposed in the longitudinal direction of the vehicle spaced from a pivot axle of the cover, with the linkage being formed from two mutually connected levers having different lengths and with a connection of the

levers to one another and at least one of the hinged connections to the cover or to the vehicle body being formed with a drivable pivot joint.

44. (Original) The convertible top system according to claim 43, wherein:

the cover is latchable in its closed position by pivoting the linkage into a dead-center position or over-center position.

45. (Original) The convertible top system according to claim 43, wherein:

the at least one drivable pivot joint is designed manually adjustably for emergency activation in the deactivated state.

46. (Original) The convertible top system according to claim 43, wherein:

the cover is fixed to the vehicle body at the edge associated with its pivot axle by means of at least one passive pivot joint.

47. (Previously Presented) The convertible top system according to claim 24, wherein:

the foldable roof elements include three roof elements which can be folded together in an S-shape such that a front one of the roof elements is stowed in a folding position rearwardly pivoted over a middle one of the roof elements, a rear one of the roof elements lying below the front roof element in the folding position and is rearwardly pivoted with respect to its position with a closed top;

wherein on an opening movement of the top, the front roof element is pivoted upwardly and rearwardly around a first pivot axle, the middle roof element is pivoted around a rear second pivot axle and the rear roof element is pivoted rearwardly around a rear third pivot axle, with the pivoting of the front roof element selectively taking place substantially during the pivoting of the middle roof element and of the rear roof element.

48. (Previously Presented) The convertible top system according to claim 24, wherein:

the foldable roof elements include three roof elements which can be folded together in an S-shape such that a front one of the roof elements is stowed in a folding position rearwardly pivoted

over a middle one of the roof elements, a rear one of the roof elements lying below the front roof element in the folding position and is rearwardly pivoted with respect to its position with a closed top;

wherein on an opening movement of the top, the front roof element is pivoted upwardly and rearwardly around a first pivot axle, the middle roof element is pivoted around a rear second pivot axle and the rear roof element is pivoted rearwardly around a rear third pivot axle, with the pivoting of the front roof element selectively taking place substantially after the pivoting of the middle roof element and of the rear roof element.

49. (Previously Presented) A convertible top system for a convertible vehicle having a vehicle body, the system comprising:

a plurality of pivotable external top elements, the external top elements including foldable roof elements, a first one of the external top elements including a lever and a second one of the external top elements including a further lever, a first gear supported at one of the levers and a second gear engaged with the first gear;

a plurality of pivot joints providing pivotable connections between the plurality of external top elements and between at least some of the top elements and the vehicle body, at least one roof element being pivotably connected to the vehicle body with at least one of the pivot joints; and

at least one drive for pivoting the at least one roof element with respect to another roof element or with respect to the vehicle body, the at least one drive being an electric motor, the electric motor introducing a drive torque directly into one of the pivot joints;

a transmission device driving one of the pivot joints, the transmission device including a screw, the screw being in engagement with the first gear;

a flexible shaft rotatably transmitting the torque of the electric motor to the screw of the transmission device;

wherein at least some of the pivot joints are independently controllable.

50. (Previously Presented) A convertible top system for a convertible vehicle having a vehicle body, the system comprising:

a plurality of pivotable external top elements, the top elements including foldable roof elements;

a plurality of pivot joints providing pivotable connections between the plurality of external top elements and between at least some of the top elements and the vehicle body, at least one roof element being pivotably connected to the vehicle body with at least one of the pivot joints, an adjustable abutment with a regulating screw provided at one of the pivot joints; and

at least one drive for pivoting the at least one roof element with respect to another roof element or with respect to the vehicle body, the at least one drive being an electric motor, the electric motor introducing a drive torque directly into one of the pivot joints;

wherein at least some of the pivot joints are separately controllable.

51. (Previously Presented) A convertible top system for a convertible vehicle having a vehicle body, the system comprising:

a plurality of pivotable external top elements, the top elements including foldable roof elements;

a plurality of pivot joints providing pivotable connections between the plurality of external top elements and between at least some of the top elements and the vehicle body, at least one roof element being pivotably connected to the vehicle body with at least one of the pivot joints, at least one of the pivot joints being rotatable by at least approximately 360°; and

at least one drive for pivoting the at least one roof element with respect to another roof element or with respect to the vehicle body, the at least one drive being an electric motor, the electric motor introducing a drive torque directly into one of the pivot joints;

wherein at least some of the pivot joints are separately controllable.

52. (Previously Presented) A convertible top system for a convertible vehicle having a vehicle body, the system comprising:

a plurality of pivotable external top elements, the top elements including foldable roof elements, a clamp and a top storage well cover;

a plurality of pivot joints providing pivotable connections between the plurality of external top elements and between at least some of the top elements and the vehicle body, at least one roof element being pivotably connected to the vehicle body with at least one of the pivot joints; and

at least one drive for pivoting the at least one roof element with respect to another roof element or with respect to the vehicle body, the at least one drive being an electric motor, the electric motor introducing a drive torque directly into one of the pivot joints;

wherein at least some of the pivot joints are separately controllable; and

wherein on an opening movement of the top, the clamp is first raised for the release of a upwardly pivoting movement of the top storage well cover and is lowered again after the putting up of the top storage well cover, after which the roof elements are placed on the clamp.